# T06D03 – (6.2a) ****Kinetic Theory Notes****

Name ……………………………………………………..

1. 6.2.1 Describe the kinetic theory in terms of the movement of particles whose average energy is proportional to temperature in kelvins. (2)
   1. What assumptions are made for the Kinetic Theory?
2. 6.2.2 Define the term activation energy, Ea. (1)
   1. What is activation energy? Provide a diagram for the activation energy in both an endothermic and exothermic reaction:

|  |  |
| --- | --- |
| **Diagram of Endothermic Reaction (focus on Ea)** | **Diagram of Exothermic Reaction (focus on Ea)** |
|  |  |

1. 6.2.3 Describe the collision theory. (2)
   1. What requirements must be set in order for a reaction to occur (based on the collision theory)?



1. 6.2.4 Predict and explain, using the collision theory, the qualitative effects of particle size, temperature, concentration and pressure on the rate of a reaction. (3)
   1. Explain how each of the following factors affect the reaction rate:

|  |  |
| --- | --- |
| **Factor** | **Explanation of the effect on reaction rate** |
| **Concentration** |  |
| **Pressure** |  |
| **Temperature** |  |
| **Particle Size** |  |
| **Light** |  |